Appl. No.: 10/804,746 Amdt. Dated April 16, 2009

Reply to Office Action of January 16, 2009

Amendments to the Claims:

1-6. (Canceled)

7. (Currently Amended) A method of cleaning contaminated matter comprising dioxins by decomposing the dioxins in the contaminated matter, wherein the method comprises:

culturing Bacillus midousuji by a process comprising: mixing a dioxin-containing substance comprising fly ash with a medium comprising a nutrient source of Bacillus midousuji, supplying oxygen to the medium, and controlling the temperature of the medium to 62° C or above, which allows activity of the Bacillus midousuji;

crushing cells of Bacillus midousuji that were cultured in the presence of a chlorinated aromatic compound that has a substituent comprising an oxygen atom bonded to an aromatic ring and having a chloro group bonded to an aromatic ring culturing step, to obtain crushed cells of Bacillus midousuji;

subjecting the crushed cells of Bacillus midousuji to centrifugation to separate the crushed cells into a pellicle fraction comprising crushed cells containing a pellicle, and a cytoplasm fraction comprising crushed cells containing cytoplasm; and

mixing the pellicle fraction, the contaminated matter, and an aqueous medium, wherein the pellicle of Bacillus midousuji breaks the ether bond of the structure of the dioxins.

- 8. (Original) The method according to claim 7, wherein the method comprises: separating a solid matter and the aqueous medium from the mixture to obtain the aqueous medium in which the solid matter is removed.
- 9. (Previously Presented) The method according to claim 7, wherein the method comprises:

secluding a source of the contaminated matter;

soaking the contaminated matter generated from the secluded source of the contaminated matter in water; and

Appl. No.: 10/804,746 Amdt. Dated April 16, 2009

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mixing the pellicle fraction with the water comprising the contaminated matter.

10. (Previously Presented) The method according to claim 8, wherein the method comprises:

secluding a source of the contaminated matter;

soaking the contaminated matter generated from the secluded source of the contaminated matter in water; and

mixing the pellicle fraction with the water comprising the contaminated matter.

- 11. (Previously Presented) The method according to claim 9, wherein the pellicle fraction is mixed with water slurry comprising the contaminated matter discharged through one method of a high pressure water washing method for washing the contaminated matter down by jetting water under high pressure to the source of the contaminated matter and a wet sandblast method for washing the contaminated matter down by jetting water and abrasive grains under high pressure to the source of the contaminated matter.
- 12. (Previously Presented) The method according to claim 10, wherein the pellicle fraction is mixed with water slurry comprising the contaminated matter discharged through one method of a high pressure water washing method for washing the contaminated matter down by jetting water under high pressure to the source of the contaminated matter and a wet sandblast method for washing the contaminated matter down by jetting water and abrasive grains under high pressure to the source of the contaminated matter.
- 13. (Currently Amended) A preparation for decomposing dioxins, the preparation being prepared by a process comprising the steps of: culturing Bacillus midousuji by a process comprising mixing a dioxin-containing substance comprising fly ash with a medium comprising a nutrient source of Bacillus midousuji, supplying oxygen to the medium, and controlling the temperature of the medium to 62° C or above, which allows activity of the Bacillus midousuji; crushing cells of Bacillus midousuji that were cultured in the presence of a chlorinated aromatic

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compound that has a substituent comprising an oxygen atom bonded to an aromatic ring and having a chloro group bonded to an aromatic ring culturing step, and subjecting the crushed cells of Bacillus midousuji to centrifugation to separate the crushed cells into a pellicle fraction comprising crushed cells containing a pellicle, and a cytoplasm fraction comprising crushed cells containing cytoplasm, the preparation comprising the pellicle fraction of Bacillus midousuji, which breaks the ether bond of the structure of the dioxins.

- 14. (Canceled)
- 15. (Canceled)
- 16. (Canceled)
- 17. (Canceled)